

ADDITIONAL NOTES ON THE ASTERACEAE OF LOUISIANA — Following our publication on the Asteraceae of Louisiana (Gandhi and Thomas 1989), we have the following taxonomic and nomenclatural notes and a correction for Louisiana asters.

P. 79. *Eupatorium glaucescens* Ell. — Correll and Johnston (1970) recognized the name *E. glaucescens* Ell. 1823 and cited *E. cuneifolium* Willd. 1803, among others, in synonymy. They did not provide any explanation for accepting a later name over an earlier name. In a personal communication, Robinson disagreed with Correll and Johnston's disposition and suggested to us to recognize the name *E. cuneifolium* and include *E. glaucescens* in synonymy. Moreover, King and Robinson (1987) followed Robinson's suggestion. Following Robinson's suggestion, we recognized the name *E. cuneifolium* for the Louisiana asters.

On further study, we found that for *E. cuneifolium*, Willdenow cited *E. marrubium* Walt. 1789 in synonymy. Because of this citation, the name *E. cuneifolium* was rendered to be superfluous, and thus illegitimate. For this reason, we reject the name *E. cuneifolium* and recognize *E. glaucescens* to be the correct name.

P. 121. *Aster spinosus* Benth. — The disposition of spiny aster has been in dispute. Generally, it has been known by the name *A. spinosus* Benth. 1869. However, its uniqueness among the Aster species was noted by many authors. Among them, Greene considered it to be related to *Leucosyris carnosa* (Gray) Greene 1897 and made a new combination: *L. spinosa* (Benth.) Greene [Pittonia 3:244. 1897]. There was very little or no following among subsequent authors for Greene's treatment.

Sundberg (1986) disagreed with both Benth and Greene, and treated spiny aster as a member of the genus *Erigeron*, and made a new combination: *Erigeron ortegae* S. F. Blake var. *spinosus* (Benth.) Sundberg. In Feb 1988, we communicated to Dr. Almut Jones (ILL) and discussed Sundberg's treatment. Jones did not accept Sundberg's new combination. At this time, she thought that inclusion of spiny aster in *Leucosyris* "would probably be the best solution." We decided to accept the name *L. spinosa*. It must be emphasized here that although we accepted the suggestion of Jones, we are responsible for any nomenclatural and/or taxonomic error.

In Nov 1989, we discussed this disposition with Dr. John T. Kartesz (NCU), and in turn, he communicated to Jones. At this time, Jones disapproved the inclusion of spiny aster in *Leucosyris*, and suggested that "At this time, the best thing is to retain the species under Aster, with a question mark." Meanwhile, Dr. Guy Nesom (TEX) informed Kartesz that the

type species of *Leucosyris* (i.e., *Linosyris carnosus* Gray) belongs in *Machaeranthera* Nees (Nesom 1989). Dr. Cronquist (NY) informed us that he would follow Sundberg's treatment. Unfortunately, Sundberg's trinomial remains unpublished (to the best of our knowledge). Moreover, we are of the opinion that *A. spinosus* should be included in a new genus. In such a complex situation and pending further study, we recognize the name "*Aster spinosus*" for the Asteraceae of Louisiana.

P. 128. **Marshallia** — In a note given in the treatment of *M. tenuifolia*, we indicated that *M. graminifolia* (Walter) Small and *M. tenuifolia* Raf. are not easily separable (in Louisiana) using the key characters given by Cronquist (1980). We reduced *M. graminifolia* as a variety of *M. tenuifolia* and made a new combination: *M. tenuifolia* var. *graminifolia* (Walter) Gandhi & Thomas. We reject this combination and regret this nomenclatural error.

In a biosystematic and phenetic analysis of *Marshallia*, Watson and Estes (1990) also indicated that these taxa are morphologically indistinguishable. However, these authors emphasized the fact that these two species have a minor, but distinct geographical distribution: "*M. graminifolia* occurring on the Atlantic Coastal Plain of the Carolinas" whereas "*M. tenuifolia* occurring in farther south along the Atlantic Coastal Plain in Georgia, and Florida and along the Gulf Coastal Plain from Florida west to Texas." Because of the existence of a geographic component between these two taxa, Watson and Estes reduced *M. tenuifolia* as a subspecies of *M. graminifolia* and made a new combination: *M. graminifolia* ssp. *tenuifolia* (Raf.) Watson. For the Asteraceae of Louisiana, we accept their treatment and assign all Louisiana taxa previously known by the names *M. graminifolia* and *M. tenuifolia* to *M. graminifolia* ssp. *tenuifolia*.

Marshallia graminifolia ssp. **tenuifolia** (Raf.) Watson, Syst. Bot. 15:412. 1990.

M. tenuifolia Raf., New Fl. 4: 77. 1838.

M. graminifolia var. *cyananthera* (Ell.) Beadle & Byont. Biltmore Bot. Stud. 1:4. 1901.

M. tenuifolia var. *graminifolia* sensu Gandhi & Thomas.

P. 129. **Matricaria** — The correct name for pineapple-weed in the genus *Matricaria* is *M. discoidea* DC. (fide Rauschert, Folia Geobot. Phytotax. 9:254–256. 1974). Rauschert indicated that Lessing proposed the name *Artemisia matricarioides* Less. [the basionym of *Matricaria matricarioides* (Less.) Porter] as an avowed substitute for *Tanacetum pauciflorum*

Richards., since the epithet pauciflora was preoccupied in *Artemisia* (e.g., *A. pauciflora* Spreng.). If Rauschert is correct, then the names *A. matricarioides* and *M. matricarioides* must be treated as taxonomic synonyms of *T. buroense* Nutt.

On verification of Lessing's protologue of *A. matricarioides*, we found that Lessing cited *T. pauciflorum* as a synonym and provided a description based on specimens collected by Chamisso and by Redowsky. Since Lessing's description is so different from Richardson's plant, some authors may argue that Lessing's citation of *T. pauciflorum* in synonymy should be viewed as incidental, and such authors may continue to recognize *M. matricarioides* to be the correct name for pineapple-weed. However, We emphasize the fact that under ICBN Art. 7.16, Ex. 3, the name *A. matricarioides* was solely validated by Lessing's reference to *T. pauciflorum*. Lessing's description is secondary here. Furthermore, Chamisso's and Redowsky's collections cited by Lessing are irrelevant in this respect, since Lessing did not definitely designate any one of them to be the type.

Lessing was not the only one who thought that *A. matricarioides* and *T. pauciflorum* were conspecific. De Candolle (Prodr. 6:131) recognized the name *T. pauciflorum* Richards. and cited *A. matricarioides* Less. as a synonym. The following is quoted from De Candolle's protologue of the name *T. pauciflorum*:

"in Unalaschka (Cham.!), Kamschatka (Red.!), *A. matricarioides* Less. in linnaea 1831. p. 210. *Cotula matricarioides* Bong. Veg. sitch. p. 29."

We conclude that Lessing erred in citing *T. pauciflorum* as a synonym of *A. matricarioides* (but nevertheless his protologue included the type of Richardson's plant for *A. matricarioides*) and that Rauschert is correct on the nomenclature of pineapple-weed.

Matricaria discoidea DC., Prodr., 6:50. 1837.

Santolina suaveolens Pursh, Fl. Amer. Sept. 2:520. 1814, non *Matricaria suaveolens* L., 1755.

Artemisia matricarioides auct. non Less. 1831.

Matricaria matricarioides auct. non (Less.) Porter 1894.

P. 162. *Solidago rugosa* Mill. — The given note "Cronquist (1980) treated *S. aspera* and *S. celtidifolia* as distinct subspecies of *S. rugosa*. We follow Taylor and Taylor (loc. cit. 1984)" is corrected to "Cronquist (1980) treated *S. aspera* as a subspecies of *S. rugosa*. We follow Taylor and Taylor (loc. cit. 1984). — *Kancheepuram* N. Gandhi, *North Carolina Botanical*

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